ABSTRACT OF THE DISCLOSURE

The invention relates to a method for identifying the markers of the locus of a major resistance gene with respect to RYMV. The invention method comprises the following steps: selective amplification of fragments of rice DNA from resistant individuals and sensitive individuals descending from parental varieties, whereby said fragments undergo a prior digestion phase followed by ligation in order to fix additional initiators having one or more specific nucleotides at the extremities thereof; separation of the amplification products; comparison of the electrophoresis profiles obtained by mixing fragments from resistant descendants and sensitive de4scendants with fragments from parental varieties, in order to identify strips where polymorphism is genetically linked to the resistance locus. Said identification is followed by a validation step in which verification occurs on all individuals and the genetic recombination rate between the marker and the resistance locus is calculated. The invention can be used to identify resistant phenotypes and transfer the RYMV resistance gene.